CAA112(r) INSPECTION REPORT

Name: Sysco St. Louis, LLC	
Address: 3850 Mueller Road, St. Charles, Missouri 63301	**Date of Inspection:** March 8, 2018
County: St. Charles	**Case No:** 18MO0308
Phone: 636-940-9230	**RMP No:** 1000 0019 7468
High Risk: No	**FRS No:** 1100 1444 3940
CAA Title V: No	**Program Level:** Program 3
Mailing Address: 3850 Mueller Road, St. Charles, Missouri 63301	
Process: Anhydrous ammonia used for refrigeration	

SUMMARY OF OBSERVATIONS

A review of the Sysco St. Louis, LLC (Sysco St. Louis) documents and facility revealed the following deficiency regarding Chemical Accident Prevention Provisions (Title 40 *Code of Federal Regulations* [CFR] Part 68):

1. **The facility had failed to update and revalidate the PHA at least every 5 years as required by 40 CFR 68.67(f).** *This preliminary finding was identified based on post-inspection findings.*

2. **The facility had failed to certify that it had evaluated compliance with the provisions of 40 CFR 68 Subpart D at least every 3 years as required by 40 CFR 68.79(a).** *This preliminary finding was identified based on post-inspection findings.*

3. **In the facility's two most recent compliance audit reports (dated March 12, 2014, and December 5, 2017), the facility had failed to certify that it had evaluated compliance with the provisions of 40 CFR 68 Subpart D as required by 40 CFR 68.79(a).** *This preliminary finding was identified based on post-inspection findings.*

4. **The facility had failed to develop a management system that defined lines of authority through an organization chart or similar document as required by 40 CFR 68.15(c).** *This preliminary finding was identified based on post-inspection findings.*

5. **The facility had not submitted an updated RMP to EPA at least once every 5 years as required by 40 CFR 68.190(b)(1).**

INTRODUCTION

I, Robert Monnig, Tetra Tech, Inc. (Tetra Tech), as a representative of the U.S. Environmental Protection Agency (EPA), Region 7, inspected the Sysco St. Louis facility in St. Charles, Missouri, on March 8, 2018.

On March 6, 2018, I called and emailed Mr. David Menke to arrange for the inspection. I asked that employees be notified of the inspection, and informed him that they are allowed to participate. Sysco St. Louis was selected for inspection because the facility was late in re-submitting its Risk Management Plan (RMP) to EPA.

I conducted the inspection to determine if the facility complies with Section 112(r) of the Clean Air Act (CAA), as amended in 1990. EPA's regulations describing how this law is to be implemented are in 40 CFR 68 (CAA). The law and implementing regulations 40 CFR 68, Chemical Accident Prevention Program (CAPP), require facilities to (1) submit to EPA a complete RMP for those regulated chemicals they have processed in amounts above applicable threshold quantities after June 21, 1999; and (2) implement the program described in the RMP.

All attachments cited in this inspection report (Attachments 1 through 14) are also in a folder on the accompanying CD. Folder numbers on the CD correspond to attachment numbers. As an example, Attachment #2 is in Folder #2. Attachments may not contain all documents or parts of documents collected at the time of the inspection; however, the accompanying folder on the CD will have the complete document(s). The CD itself is Attachment 14, and contains a copy of this inspection report, the original documents obtained, photographs taken during the inspection, the RMP current at the time of the inspection, emails between the facility and the compliance inspector, checklists, and completed forms.

HISTORY OF BUSINESS

The Sysco St. Louis facility in St. Charles, Missouri is a food distribution and warehousing facility. To cool warehouse space for food storage, the facility operates an anhydrous ammonia refrigeration system with a charge of approximately 21,000 pounds. The refrigeration system was built in 1995, and an expansion of the system was completed in 2017 to accommodate a 77,000-square-foot expansion of the warehouse. The RMP-regulated substance at the facility is anhydrous ammonia, used in the facility's refrigeration system.

PERSONS INTERVIEWED AND INDIVIDUAL RESPONSIBILITIES

I interviewed the following persons as part of the inspection process:

David Menke.....Maintenance/Facility Manager, Sysco
David Chase.....Safety Manager, Sysco
Patrick Rawley.....Vice President of Operations, Sysco
Robert Thomas.....Director, Environmental Compliance, Sysco

OPENING CONFERENCE

I arrived at the Sysco St. Louis facility in St. Charles, Missouri, on Thursday, March 8, 2018, at approximately 7:30 a.m., and entered the plant office where I met Mr. Menke, Maintenance/Facility Manager for Sysco St. Louis; Mr. David Chase, Safety Manager for Sysco St. Louis; and Mr. Patrick Rawley, Vice President of Operations for Sysco St. Louis. We sat down in a conference room and I explained that I was conducting the inspection under authority of the CAA's Chemical Accident Prevention Provisions. I explained that I would need to conduct a walk-through of the covered process, taking photographs. I also stated that after completing the walk-through and reviewing all applicable documents, I would conduct an exit interview to explain my findings, provide a receipt for any requested document copies, and answer questions. I showed Mr. Rawley my letter of authorization from EPA Region 7. I then filled out a Notice of Inspection Form (see Attachment 1), and I explained that my inspection was for enforcement purposes and that enforcement actions could result from the inspection. Mr. Rawley signed the Notice of Inspection form. At that point, I began filling out the Region 7 multi-media screening checklist (see Attachment 1), directing questions to Mr. Menke, Mr. Chase, and Mr. Rawley. Following the opening conference, Mr. Robert Thomas, Director of Environmental Compliance for Sysco, joined us for the remainder of the inspection.

After the introduction and completion of the multi-media screening checklist, I asked to see the facility RMP documentation, including the off-site consequence analysis, process safety information, process hazard analyses, operating procedures, training records, maintenance records, compliance audits, and emergency response procedures. As I reviewed available documents, I directed any questions I had to Sysco staff, and I noted my findings on the Region 7 Checklist for Risk Management Plan Investigations or Audits at Program 3 Stationary Sources and on the Region 7 Checklist for Ammonia Refrigeration Facilities (see Attachment 1).

HAZARD ASSESSMENT

I reviewed the facility's hazard assessment and off-site consequence analysis (OCA) documentation, and found that the facility had prepared worst-case and alternative release scenarios (Attachment 2). The OCA was last updated by the facility in May 2017 during the facility's expansion of the refrigeration system. The worst-case scenario involved emptying of 9,479 pounds of anhydrous ammonia from the high-pressure receiver (the largest vessel of the refrigeration system). The OCA documentation indicates a distance to endpoint (DTE) of 1.2 miles based on analysis by use of RMP*Comp. The facility reported that this worst-case scenario would affect a population of 2,100 persons.

I obtained a copy of the facility's 2017 Emergency Planning and Community Right-to-Know Act (EPCRA) Tier II report (see Attachment 3), which lists a maximum daily amount of anhydrous ammonia between 10,000 and 24,999 pounds.

PROCESS SAFETY INFORMATION (PSI)

I examined the facility's PSI, and obtained a copy of the facility's Safety Data Sheet (SDS) for anhydrous ammonia and a block flow diagram of the process (see Attachment 4). I asked to review the facility's maximum intended inventories for anhydrous ammonia, and was provided an inventory calculation (see Attachment 4) that listed an anhydrous ammonia inventory of 20,600 pounds. I also obtained documentation related to design codes and standards employed, relief line sizing, and ventilation system design (see Folder 4 on the CD). I observed that some safe upper and lower limits had been referenced in standard operating procedures (SOP).

Process Hazard Analyses (PHA)

The facility showed me copies of PHAs dated June 2000, September 2005, February 2008, May 2013, and May 2017. I obtained copies of the 2013 and 2017 PHAs (see Folder 5 on the CD). The 2013 and 2017 PHAs applied "what if" and checklist methodologies. The 2017 expansion of the refrigeration system had prompted the facility to conduct the May 2017 PHA. I noted the PHAs addressed hazards of the process, engineering and administrative controls, consequences of failure, source siting, and human factors. The PHAs provided a qualitative evaluation of the range of possible safety and health effects that would result from failure of controls. I asked how the facility tracks and documents resolutions to PHA findings. The facility provided me copies of spreadsheets used to track the 2013 and 2017 PHA recommendations (see Attachment 5).

Following the inspection, I noted that more than 5 years had elapsed between the June 2000 and September 2005 PHAs and the February 2008 and May 2013 PHAs, and identified the following post-inspection preliminary finding:

1. **The facility had failed to update and revalidate the PHA at least every 5 years as required by 40 CFR 68.67(f).** *This preliminary finding was identified based on post-inspection findings.*

STANDARD OPERATING PROCEDURES (SOP)

I asked to review the facility's operating procedures for the covered process. Mr. Chase showed me that SOPs were stored on the facility's electronic ePSM system, accessible to employees who operate and maintain the refrigeration system. I noted that the SOPs addressed various operating phases, including initial startup, normal operations, temporary operations, emergency shutdown, emergency operations, normal shutdown, and startup following a shutdown. I also noted that the SOPs referenced operating limits, safety and health considerations, and safety systems. I obtained copies of SOPs addressing (1) emergency shutdown, (2) operation of the high-pressure receiver, (3) initial start-up, (4) operation of a low-temperature recirculatory oil pot (see Attachment 6), (5) ammonia sensor challenging procedures, and (6) relief valve changing procedures (see Folder 6 on the CD). I asked if the facility had safe work practices addressing lockout/tagout, confined space entry, and line break. Mr. Chase was able to show me such procedures.

TRAINING

I asked how the facility trains employees to operate the covered process. Mr. Thomas told me that new employees receive safety and hazard awareness training through Hazardous Waste Operations and Emergency Response (HAZWOPER) courses and the company's web-based platform called "Sysco Interactive University (SIU)." SIU courses address hazards of ammonia and Occupational Safety and Health Administration (OSHA) Process Safety Management (PSM) and RMP programs. Mr. Chase and Mr. Menke told me that operators of the refrigeration system were also trained on specific procedures of the system through vendor-provided training (employees attain "Operator Level 1" and "Operator Level 2" credentials through training and testing). They told me that the vendor-provided training occurs on site and is specific to Sysco's refrigeration system. Mr. Chase showed me that employee training records are maintained on the company's ePSM system, and he showed me training records for Mr. Menke, an Operator Level 2 (see Attachment 7).

MECHANICAL INTEGRITY

I asked about the facility's mechanical integrity program. I was shown a written company policy related to mechanical integrity. Mr. Chase also showed me how the facility implements its mechanical integrity program using the ePSM system. He showed me how required inspections and testing of the covered process equipment are populated into ePSM so that work orders are generated at the various intervals (e.g., daily, weekly, monthly, semi-annually). I asked how the frequency of inspections and testing is determined, and I was told that the facility references manufacturer recommendations and International Institute of Ammonia Refrigeration (IIAR) guidelines when determining frequencies. I asked Mr. Chase to show me mechanical integrity procedures for specific equipment, including the anhydrous ammonia detection system and pressure relief valves, and Mr. Chase was able to demonstrate that a testing and inspection program had been established for this equipment, and showed me testing schedules that had been entered into ePSM.

MANAGEMENT OF CHANGE (MOC)

I reviewed the facility's written procedures for MOC, including the facility's MOC procedure, which I collected (see Folder 8 on the CD). The MOC procedure includes a blank MOC form (included in Attachment 8). Mr. Chase also provided copies of previously completed MOCs (see Folder 8 on the CD). I reviewed these MOCs, and they appeared to address the required elements.

PRE-STARTUP SAFETY REVIEW (PSSR)

During the inspection, I reviewed a PSSR form related to the 2017 expansion of the refrigeration system, and the PSSR review appeared to meet the requirements of 40 CFR 68.77.

COMPLIANCE AUDIT

I asked to see the facility's two most recent compliance audit reports regarding the covered process. Mr. Chase and Mr. Menke showed me reports of compliance audits dated March 12, 2014, and December 5, 2017, and I obtained copies (see Folder 9 on the CD). These audits address both OSHA Process Safety Management (PSM) and RMP requirements. I reviewed the 2017 compliance audit report and noted that the facility used a spreadsheet to schedule and track progress of corrective actions related to the audit findings. I noted that the facility had already addressed most findings, and completed actions included installing a crash/panic bar on the emergency exit doors of the engine room, more clearly documenting confined space areas, removing redundant or superseded SOPs from the facility's ePSM system, and ensuring ammonia alarm setpoints are set at the intended concentrations. The tracking spreadsheet for 2017 compliance audit findings is included as Attachment 9.

Following the inspection, I noted that more than 3 years had lapsed between the compliance audits on March 12, 2014, and December 5, 2017; therefore, I identified the following post-inspection preliminary finding:

2. **The facility had failed to certify that it had evaluated compliance with the provisions of 40 CFR 68 Subpart D at least every 3 years as required by 40 CFR 68.79(a).**

Furthermore, following the inspection, I reviewed the compliance audit reports and examined the included certification statements. I noted that the certifications did not state explicitly that the facility was certifying that it had evaluated compliance with the provisions of 40 CFR 68 Subpart D; rather, the certification statements appeared to be certifying that the facility had evaluated compliance with OSHA's PSM standard (29 CFR 1910.119). Based on this observation, I identified the following post-inspection preliminary finding:

3. **In the facility's two most recent compliance audit reports (dated March 12, 2014, and December 5, 2017), the facility had failed to certify that it had evaluated compliance with the provisions of 40 CFR 68 Subpart D as required by 40 CFR 68.79(a).**

INCIDENT INVESTIGATION AND OSHA 300 LOGS

I asked Mr. Chase and Mr. Menke if any previous incidents had resulted in or posed potential for catastrophic releases of anhydrous ammonia. They said that no such incidents had occurred. During the inspection, I reviewed the facility's OSHA 300 logs from years 2012 through 2018, and found no documented incidents related to anhydrous ammonia.

EMPLOYEE PARTICIPATION

I asked if the facility had a written plan to implement employee participation in PHA and other applicable elements. Mr. Chase provided me a copy of the facility's employee participation plan (see Attachment 10). In my review of the 2013 and 2017 PHAs, I also noted that the PHAs addressed employee participation.

HOT WORK PERMIT

I was shown a copy of a hot work permit for work near the covered process. The permit addressed the required elements. I obtained a copy of the hot work permit (see Attachment 11).

CONTRACTORS

I asked Mr. Chase how the facility evaluates information regarding contractor safety performance. Mr. Chase told me that Sysco St. Louis conducts annual evaluations of contractors and requires contractors to provide safety performance information such as OSHA 300 and Ex-Mod rates. Mr. Chase also told me that contractors working on the anhydrous ammonia refrigeration system are required to provide copies of training certificates.

EMERGENCY RESPONSE

Mr. Chase told me that the facility would rely on local emergency responders to respond to accidental releases of anhydrous ammonia.

Prior to the inspection, on March 7, 2018, I called the St. Charles County Emergency Management office to inquire about Sysco St. Louis coordination with local emergency responders. The Emergency Management office told me that Sysco St. Louis submits its EPCRA Tier II reports annually, and that their office has not had any problems with Sysco St. Louis's level of coordination.

MANAGEMENT SYSTEM

I asked Mr. Thomas if Sysco St. Louis had a developed a management system to oversee implementation of the facility's RMP program. Mr. Thomas explained that the facility uses the ePSM system to manage implementation of the facility's RMP program, and he showed me examples of RMP responsibilities that had been assigned to different persons in ePSM.

Following the inspection, I reviewed 40 CFR 68.15 and noted that the rule specifies that names or positions of persons with delegated responsibility be documented, and that lines of authority shall be defined through an organization chart. I recalled that the facility had not shown me such an organization chart when I had asked about the facility's management system; therefore, I identified the following post-inspection preliminary finding:

4. **The facility had failed to develop a management system that defined lines of authority through an organization chart or similar document as required by 40 CFR 68.15(c).**

RISK MANAGEMENT PLAN

I reviewed the facility's current RMP submission, dated October 25, 2017, which EPA had provided me (see Attachment 12). I noted that the executive summary included the six required elements, and during the inspection I confirmed that emergency contact information was correct. EPA had told me that Sysco St. Louis had been selected for inspection due to a late RMP filing status. The facility's previous RMP submission, which EPA had also provided me (see Attachment 12), was dated December 16, 2011. Because more than 5 years had elapsed between these RMP filings, I identified the following preliminary finding:

5. **The facility had not submitted an updated RMP to EPA at least once every 5 years as required by 40 CFR 68.190(b)(1).**

PHOTOGRAPHS

During the site walk-through, 15 digital photographs were taken; these photographs are presented in a photographic log in Attachment 13. All 15 photographs are also in Folder 13 on the CD.

CLOSING CONFERENCE

At the conclusion of the inspection, I reviewed my observations and the one preliminary finding with Mr. Menke, Mr. Chase, Mr. Rawley, and Mr. Thomas. I also explained that findings could be identified via post-inspection review of the documents obtained. I provided the Confidentiality Notice and the completed Receipt for Samples and Documents form (see Attachment 1), which Mr. Rawley reviewed. Mr. Rawley reviewed the receipt for documents first, signed it, and completed the Confidentiality Notice. I then filled out the Notice of Preliminary Findings form (see Attachment 1), and provided it to Mr. Rawley for review and signature.

I departed the facility at approximately 4:00 p.m. on March 8, 2018.

This report concludes my inspection activities regarding the Sysco St. Louis facility in St. Charles, Missouri.

Robert Monnig

Robert Monnig
Compliance Inspector

ATTACHMENTS

1 – Inspection Forms and Checklists
2 – Hazard Assessment
3 – EPCRA Tier II
4 – Process Safety Information
5 – Process Hazard Analysis
6 – Standard Operating Procedures
7 – Training
8 – Management of Change
9 – Compliance Audits
10 – Employee Participation
11 – Hot Work Permit
12 – Risk Management Plan
13 – Photographic Log
14 – CD – Attached to Report

Sysco St. Louis, LLC
St. Charles, Missouri

CASE NO. 18MO0308	DESCRIPTION	This photograph shows an emergency shower/eye wash station and an emergency ventilation control box immediately outside the engine room.	1
	FACILITY	Sysco St. Louis, LLC	Date
Direction: South	PHOTOGRAPHER	Robert Monnig	3/8/2018

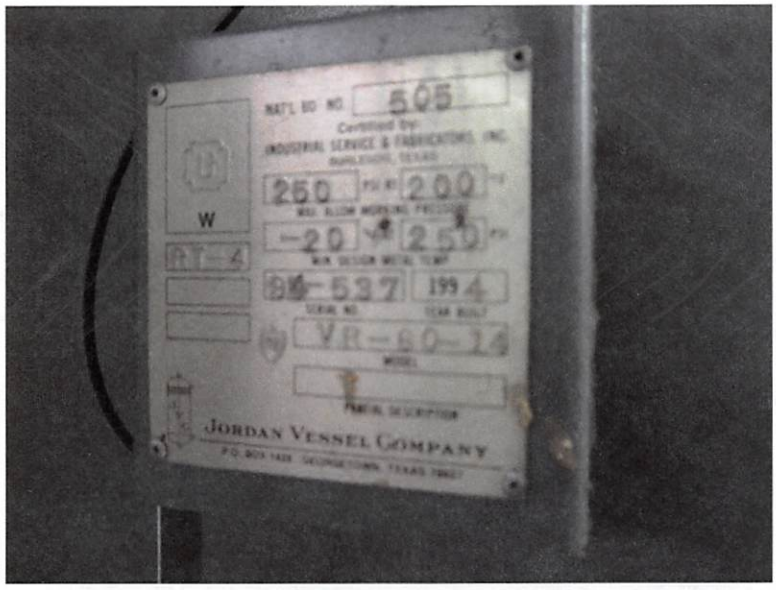
CASE NO. 18MO0308	DESCRIPTION	This photograph shows compressors in the engine room.	2
	FACILITY	Sysco St. Louis, LLC	Date
Direction: West	PHOTOGRAPHER	Robert Monnig	3/8/2018

Sysco St. Louis, LLC
St. Charles, Missouri

CASE NO. 18MO0308	DESCRIPTION	This photograph shows typical piping labeling observed in the engine room.	3
	FACILITY	Sysco St. Louis, LLC	Date
Direction: *NA*	PHOTOGRAPHER	Robert Monnig	3/8/2018

CASE NO. 18MO0308	DESCRIPTION	This photograph shows the high-pressure receiver and the labeled king valve.	4
	FACILITY	Sysco St. Louis, LLC	Date
Direction: *NA*	PHOTOGRAPHER	Robert Monnig	3/8/2018

Sysco St. Louis, LLC
St. Charles, Missouri



CASE NO. 18MO0308	DESCRIPTION	This photograph shows the data plate of the high-pressure receiver.	5
	FACILITY	Sysco St. Louis, LLC	Date
Direction: *NA*	PHOTOGRAPHER	Robert Monnig	3/8/2018

CASE NO. 18MO0308	DESCRIPTION	This photograph shows an emergency shower/eye wash station in the engine room.	6
	FACILITY	Sysco St. Louis, LLC	Date
Direction: *NA*	PHOTOGRAPHER	Robert Monnig	3/8/2018

Sysco St. Louis, LLC
St. Charles, Missouri

CASE NO. 18MO0308	DESCRIPTION	This photograph shows an oil pot equipped with a self-closing valve. A shut-off valve is installed in series with the self-closing valve.	7
	FACILITY	Sysco St. Louis, LLC	Date
Direction: *NA*	PHOTOGRAPHER	Robert Monnig	3/8/2018

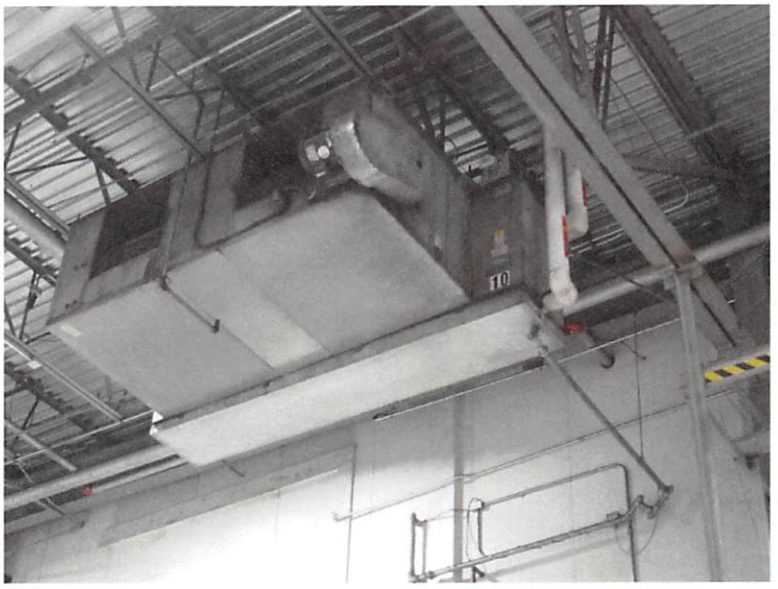
CASE NO. 18MO0308	DESCRIPTION	This photograph shows dual relief valves installed on the high-pressure receiver.	8
	FACILITY	Sysco St. Louis, LLC	Date
Direction: *NA*	PHOTOGRAPHER	Robert Monnig	3/8/2018

Sysco St. Louis, LLC
St. Charles, Missouri

CASE NO. 18MO0308	DESCRIPTION	This photograph shows the water-filled dispersion tank outside of the engine room. Relief valves in the engine room are routed to this dispersion tank.	9
	FACILITY	Sysco St. Louis, LLC	Date
Direction: Southeast	PHOTOGRAPHER	Robert Monnig	3/8/2018

CASE NO. 18MO0308	DESCRIPTION	This photograph shows the top of the dispersion tank and the vent line of the dispersion tank that terminates at the atmosphere on top of the roof.	10
	FACILITY	Sysco St. Louis, LLC	Date
Direction: Southeast	PHOTOGRAPHER	Robert Monnig	3/8/2018

Sysco St. Louis, LLC
St. Charles, Missouri



CASE NO. 18MO0308	DESCRIPTION	This photograph shows a typical evaporator unit in a cold space of the facility.	11
	FACILITY	Sysco St. Louis, LLC	Date
Direction: *NA*	PHOTOGRAPHER	Robert Monnig	3/8/2018

CASE NO. 18MO0308	DESCRIPTION	This photograph shows an evaporator that was installed during the facility's 2017 expansion.	12
	FACILITY	Sysco St. Louis, LLC	Date
Direction: *NA*	PHOTOGRAPHER	Robert Monnig	3/8/2018

Sysco St. Louis, LLC
St. Charles, Missouri

CASE NO. 18MO0308	DESCRIPTION	This photograph shows typical labeling of anhydrous ammonia piping on the roof of the facility.	13
	FACILITY	Sysco St. Louis, LLC	Date
Direction: *NA*	PHOTOGRAPHER	Robert Monnig	3/8/2018

CASE NO. 18MO0308	DESCRIPTION	This photograph shows the termination of the diffusion tank vent line.	14
	FACILITY	Sysco St. Louis, LLC	Date
Direction: West	PHOTOGRAPHER	Robert Monnig	3/8/2018

Sysco St. Louis, LLC
St. Charles, Missouri

CASE NO. 18MO0308	DESCRIPTION	This photograph shows typical ammonia piping and piping support on the roof of the facility.	15
	FACILITY	Sysco St. Louis, LLC	Date
Direction: West	PHOTOGRAPHER	Robert Monnig	3/8/2018